# HAKAN OKAY

### SOFTWARE DEVELOPER

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#### **EXPERIENCE**

# **Software Developer** @ hakanokay.dev ~ Ottawa, ON

June 2022 - Present

- Redesigned and redeveloped Musme Library using modern web technologies, reducing page load times by 50%. Mentored the other four contributors and offered feedback on their code.
- Developed an OLTP web service to manage the sale records of a local store doing online sales using Next.is, FastAPI and MySQL, saving time spent on manual data entry and data management for a team of 8 people.
- Trained and deployed an ensemble machine learning model using Scikit-learn for an e-commerce business to predict the likelihood of conversion in a session based on user-generated events with a 91% accuracy (f1-score).
- Migrated a CRM application from plain PHP to Python and updated the data retrieval and processing scripts, increasing data processing efficiency by 25%. Implemented additional data validation steps using Pydantic.

# **Backend Engineer** @ datablast.io ∼ Ottawa, ON

September 2022 - February 2023

- Built an SQL generation engine using Jinja to automate the data modelling & warehousing process for products with similar data characteristics, resulting in a 30% faster onboarding process and increased development efficiency.
- Debugged issues within the parser of a specialized SQL-like querying language designed for simpler and more efficient cloud querying. Added unit tests for bug-causing edge cases, mitigating the risk of future errors.
- Implemented new features to blast, a CLI tool enabling cross-functional teams to validate and run data transformations using SQL and Python on the same pipeline, leading to a 30% increase in development efficiency.
- Created and optimized RESTful API endpoints querying BigQuery warehouses to generate static analytics reports, improving response times by 15%.

# **Data Engineer** @ datablast.io ∼ Izmir, Turkey

March 2022 - September 2022

- Built and managed ETL pipelines to process ∼1 billion rows of user-generated data daily, originating from 10 clients across 35 mobile applications and various backends.
- Implemented custom Airflow operators for data validations. Used the operators on 18 different ETL pipelines, reducing data inconsistencies, and resulting in more reliable dashboards built by the data teams.
- Implemented Airflow operators to notify stakeholders about recurring warehousing and querying costs, sending warnings about high-cost actions performed, preventing excessive or unexpected costs.
- Created the technical documentation of Blast Data Platform, allowing data teams to navigate the implementation process easily, resulting in shorter onboarding times and 20% less support tickets.

### SKILLS

Languages & Technologies: Python, SQL, TypeScript, JavaScript, HTML, CSS, Go, Java

Libraries & Frameworks: React, Next.js, Tailwind, Prisma, FastAPI

Tools & Platforms: Linux, Git, Docker, Airflow, GCP, AWS

Databases: MySQL, Postgres, Oracle, MongoDB

## **EDUCATION**

Algonquin College Ottawa, ON

Diploma in Computer Programming September 2022 - December 2023

Miuul & Data Science Academy Izmir, Turkey (Remote)

Data Science and Machine Learning Bootcamp December 2021 - March 2022

**Akdeniz University** Antalya, Turkey

September 2014 - September 2019 Bachelor's Degree in Engineering